

两种狐尾藻属(小二仙草科)植物在中国的新记录

于丹* 王东 李中强

(武汉大学生命科学院 武汉 430072)

Two species of the genus *Myriophyllum* L. (Haloragaceae) newly recorded in China

YU Dan* WANG Dong LI Zhong-Qiang

(School of Life Science, Wuhan University, Wuhan 430072)

Abstract *Myriophyllum alterniflorum* DC. and *M. tuberculatum* Roxb. of the Haloragaceae, are reported as new records in China.

Key words *Myriophyllum*; New records; China

摘要 互花狐尾藻 *Myriophyllum alterniflorum* DC. 和刺果狐尾藻 *M. tuberculatum* Roxb. 为中国首次记录。

关键词 狐尾藻属; 新记录; 中国

1 互花狐尾藻 新拟 图 1

Myriophyllum alterniflorum DC. in Lam. & DC., Fl. Fr. ed. 3, 5: 529. 1815; Kom., Fl. Kanch. 2: 333. 1929; Muens, Aquat. Pl. USA. 278. 1944; Gorschkova in Kom., Fl. URSS. 15: 666. 1949; Cook in Tutin *et al.* Fl. Europ. 2: 312. 1968; Crow & Hellquist, Aquat. Pl. New Engl. 6: 10. 1983. TYPE: France. (not seen).

一年生水生草本。无冬芽;茎多分枝。沉水叶4~5枚轮生,羽状分裂,裂片8~10对,短而密,长0.5~1.5 cm。雌雄同株,花序穗状,长3~7 cm或更长;苞叶卵形或长圆形,边缘全缘或具小齿,长不及花的2倍;花单生于苞叶腋,至少上部数朵花互生;雄花具4花瓣,花瓣早落,雄蕊8;雌花无花瓣。果为四分果,分果边缘具3~4个疣突,背面平滑罕有瘤突。

China. Anhui (安徽): Suson (宿松), Bohu Lake (泊湖), D. Yu (于丹) 930937 (WH); the same locality, Huangda Lake (黄大湖), D. Yu 930925 (WH). Hubei (湖北): Daye (大冶), Baoan Lake (保安湖), D. Yu 947001, 948011 (WH); Ezhou (鄂州), Liangzi Lake (梁子湖), D. Yu 938124 (WH). Jiangsu (江苏): Yixing (宜兴), Longshishan (龙狮山), J. Shen (沈骏) 992 (NAS); Guhe (古河), Huadong Station (华东工作站) 3757 (PE, NAS). Gansu (甘肃): Wudu (武都), D. Wang & Z. Q. Li (王东, 李中强) 70006b (WH). 中国分布新记录。

分布: 欧洲中北部、中亚、俄罗斯的鄂霍茨克和堪察加、美国的新英格兰地区至阿拉斯加。

本种环境饰变较强,产自华中地区的标本花序增长,这可能与其分布点的2~3 m水

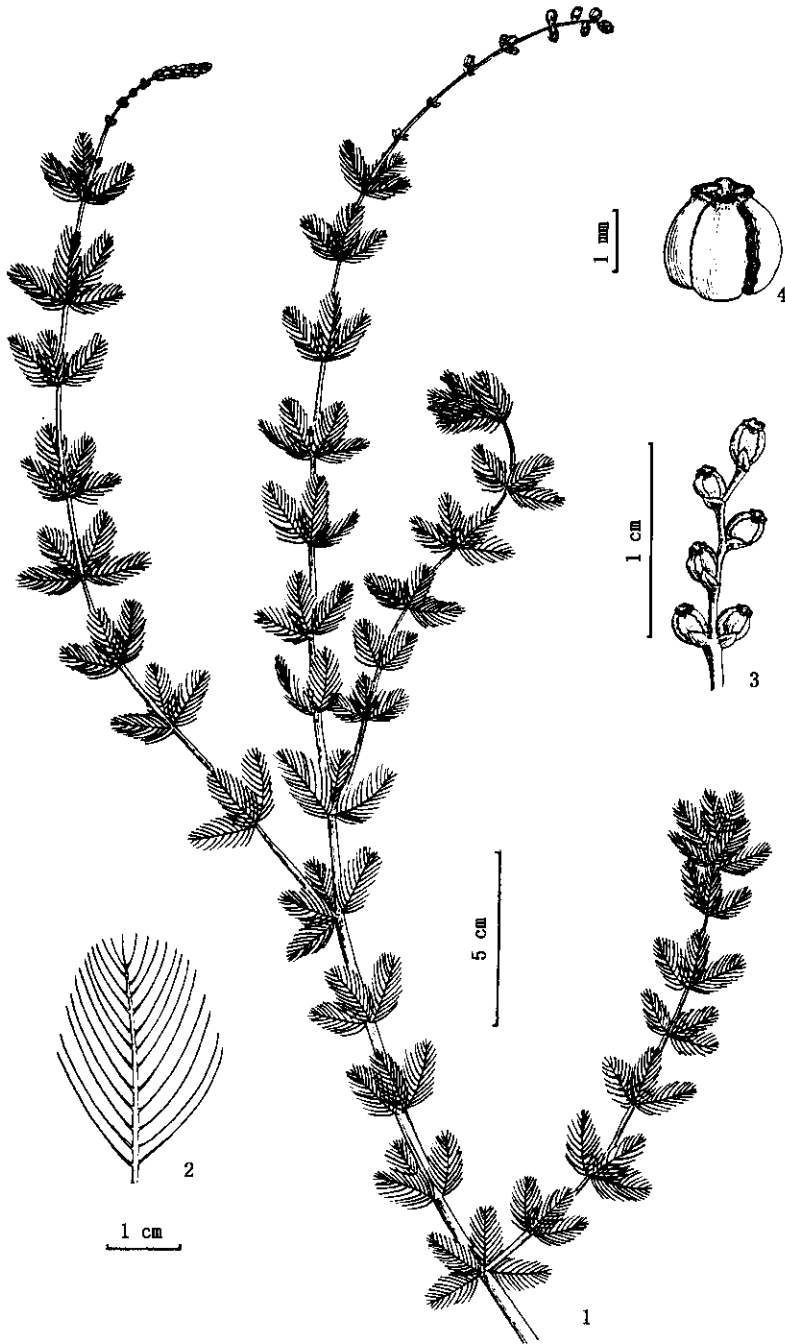


图1 互花狐尾藻 1. 花枝; 2. 叶; 3. 果枝一部分; 4. 果。

Fig. 1 *Myriophyllum alterniflorum* DC. 1. Flowering branch; 2. Leaf; 3. Part of fruiting branch; 4. Fruit.

深生境有关。Aiken (1981)注意到在贫营养型水体中互花狐尾藻的叶片变得短而密。Ceska & Cesla *et al.* (1986)指出产自北欧的本种植株较粗壮,形同 *M. sibiricum* Kom. (即 *M. spicatum* L. var. *muricatum* Maxim.),证实了 Aiken & McNeill (1980)的观察结果。Faegri (1982)认为两种有明显区别:互花狐尾藻无冬芽,染色体数目 $2n = 14$; *M. sibiricum* 有冬芽,

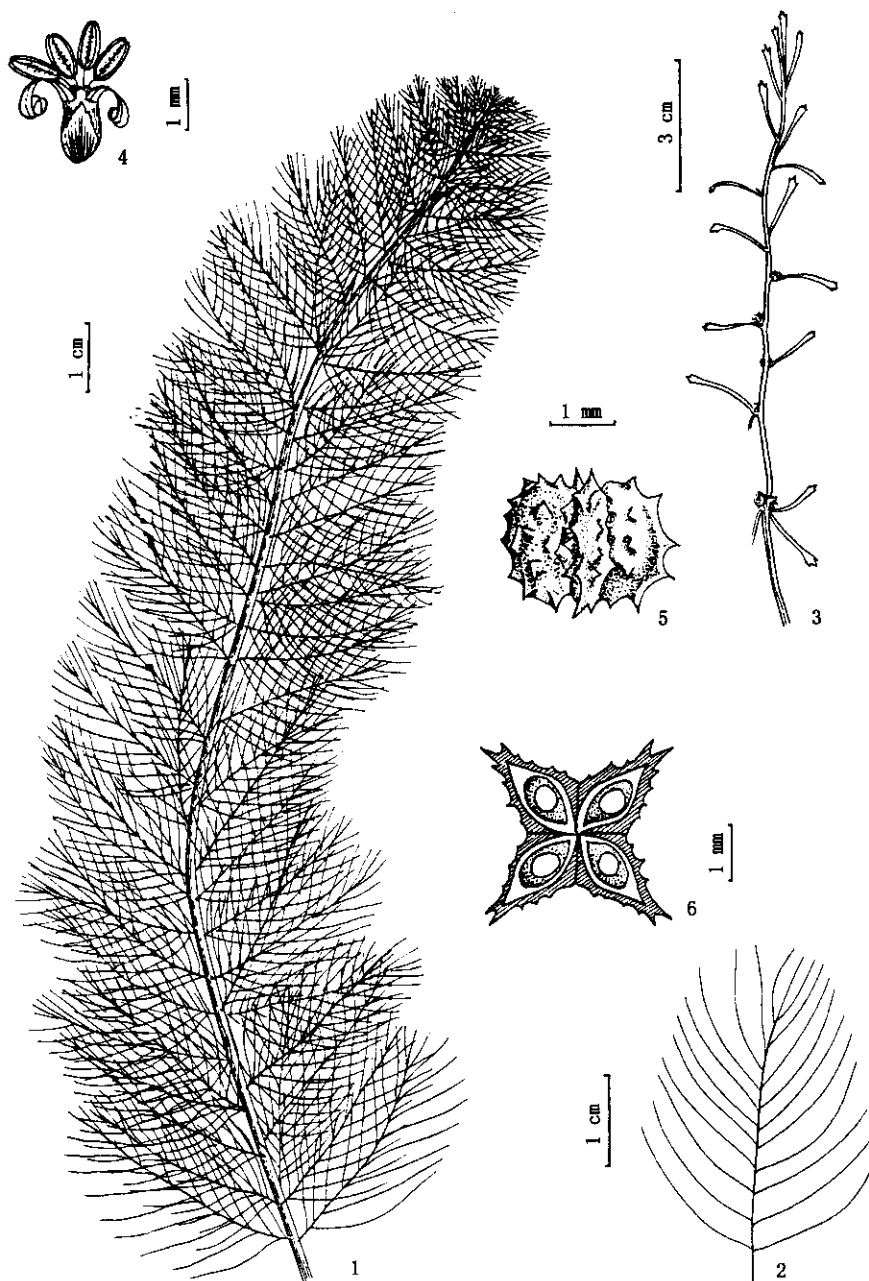


图2 刺果狐尾藻 1. 沉水枝; 2. 沉水叶; 3. 花序; 4. 花; 5. 果横切面。
Fig. 2 *Myriophyllum tuberculatum* Roxb. 1. Submerged branch; 2. Submerged leaf; 3. Inflorescence;
4. Flower; 5. Fruit; 6. Cross section of fruit.

染色体数目为 $2n=42$ 。此外互花狐尾藻的花在花序轴上互生,而 *M. sibiricum* 的花为轮生,两种花粉粒的形状亦不同(Faegri, 1982; Aiken, 1978)。Harris *et al.* (1992)通过对互花狐尾藻种下变异的研究 证明本种不同群体间存在明显的遗传变异。

2 刺果狐尾藻 新拟 图2

Myriophyllum tuberculatum Roxb., Hort. Beng. 12. 1841, nom. nud.; Fl. Ind. 1:

471. 1820; DC., Prodr. 3: 69. 1828; Roxb., Fl. Ind. ed. Carey 1: 451. 1832; Miq., Fl. Ind. Bat. 1 (1): 635. 1855; Kurz. in J. As. Soc. Beng. 40 (2): 52. 1871; Clarke in Hook. f., Fl. Br. Ind. 2: 432. 1878; Schindler in Engl. Pflanzenr. 23(4, 225): 96. 1905; Sinclair in Bull. Bot. Soc. Beng. 9 (2): 94. 1955; Subramanyam, Aq. Ang. 17. 1962; Sinclair in Gard. Bull. Sing. 22: 230. 1967; Vasudevan & Kesan Nair in J. Bomb. Nat. Hist. Soc. 64: 391. f. 1 ~ 22. 1967; Meijden in Blumea 17: 308. 1969; Meijden & Caspers in van Steenis, Fl. Males. Ser. 1, 7 (1): 256. 1971; Cook D. K., Aquat. Wetl. Pl. Ind. 214. 1996. TYPE: E. India. (not seen).

多年生水生草本。茎多分枝。沉水叶 4~5 枚轮生,长 2.5~4 cm,裂片 8~25 对,长 1~2 cm,丝状。苞叶明显互生,花序上部者全缘,下部具稀疏浅齿裂,长 0.5~2 cm,伸展或下弯;花单生于苞叶腋,无梗,通常为两性花,稀上部为雄花下部为雌花;萼片小,全缘或具齿,直立;花瓣 4,长 0.5~1.5 mm,于花后开展,晚落,雄蕊 4。果为四分果,其横切面呈十字形,长 2~3.5 mm,分果背面具锐纵棱和刺状突起。

China. Guangdong (广东): Yingde (英德), Wentongshan (温塘山), H. Y. Liang (梁向日) 61409 (PE); D. Wang *et al.* (王东等) 833 (WH).

中国分布新记录;国外分布印度、孟加拉、缅甸、马来半岛北部、加里曼丹东南部和其他群岛。

Meijden (1969), Meijden & Caspers (1971) 以及 Aston (1977) 曾记载澳大利亚产本种植物,但据 Orchard (1990) 的研究,被定为本种的澳大利亚标本实系 *M. muricatum* Orch.; *M. tuberculatum* 仅分布在亚洲南部及东南部。

致谢 感谢下列标本馆馆长给予借阅和查阅标本: PE, IFP, IBSC, HIB, CDBI, NAS, NEFI, WH 和 N。

参 考 文 献

- Aiken S G, 1978. Pollen morphology in the genus *Myriophyllum* (Haloragaceae). Can J Bot, 56: 976~982
 Aiken S G, 1981. An experiment relating vegetative morphology of *Myriophyllum alterniflorum* DC. (Haloragaceae) to growth substrate. Aquat Bot, 10: 383~388
 Aiken S G, McNeill J, 1980. The discovery of *Myriophyllum exalbescent* Fernald (Haloragaceae) in Europe and the typification of *M. spicatum* L. and *M. verticillatum* L. Bot J Linn Soc, 80: 213~222
 Aston H I, 1977. Aquatic Plants of Australia. Melbourne: Melbourne University Press. 79~98
 Ceska A, Ceska O, 1986. Notes on *Myriophyllum* (Haloragaceae) in the Far East: the identity of *Myriophyllum sibiricum* Komarov. Taxon, 35(1): 95~100
 Faegri K, 1982. The *Myriophyllum spicatum* group in North Europe. Taxon, 31(3): 467~471
 Harris S A, Maberly S C, Abbott R J, 1992. Genetic variation within and between populations of *Myriophyllum alterniflorum* DC. Aquat Bot, 44: 1~21
 van der Meijden R, 1969. An annotated key to the South East Asiatic, Malesian, Mascarene and African species of *Myriophyllum* (Haloragaceae). Blumea, 17(2): 303~311
 van der Meijden R, Caspers N, 1971. *Myriophyllum*. In: van Steenis C G G J ed. Fl Malesiana, Ser 1. Groningen: Wolters-Noordhoff Publishing. 7(1): 248~259
 Orchard A E, 1990. Haloragaceae. In: George A S ed. Flora of Australia. Canberra: Australian Government Publishing Service. 18: 5~85

(责任编辑 徐黎)